

REMARKS

Claims 1 -17 are all the claims presently pending in the application. Applicant gratefully acknowledges the Examiner's indication that claims 9-11 and 17 are allowed and that claims 1-8 and 12-16 would be allowable if claims 1, 5, 8, 12-13, and 15 were rewritten to overcome informalities under 35 U.S.C. § 112, second paragraph.

Claims 1, 5, 8, 12-13, and 15 have been amended in a manner believed fully responsive to all points raised by the Examiner, thereby to pass all of the claims to allowance. It is noted that Examiner's rejection of claim 8 appears to actually be to claim 6. Thus, claim 6 has been amended accordingly. No new matter has been added.

Attached hereto is a marked-up version of the changes made to the claims by the current Amendment. The attached pages are captioned "Version with Markings to Show Changes Made".

It is noted that the claim amendments herein are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims, or for any statutory requirements of patentability.

Further, it is noted that, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

FORMAL MATTERS AND CONCLUSION

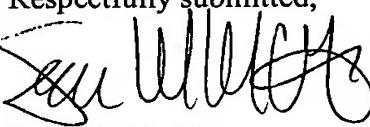
In response to Examiner's objections to the Drawings, Applicant files herewith a Submission of Proposed Drawing Corrections for Figure 1, textually labeling elements 11 and 12.

Additionally, the Abstract and title have been amended in a manner believed fully responsive to all points raised by the Examiner.

In view of the foregoing, Applicant submits that claims 1-17, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiencies in fees or to credit any overpayment of fees to Attorney's Deposit Account No. 50-0481.

Date: 6/26/03
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Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES

IN THE TITLE:

Please replace the original title with the following title:

(Amended) PRINT CONTROL METHOD OF ELECTROPHOTOGRAPH AND IMAGE FORMATION APPARATUS WITH POTENTIAL SENSOR USING THE METHOD

IN THE ABSTRACT:

Please replace the original Abstract with the following Abstract:

ABSTRACT OF THE DISCLOSURE

A print control method of an electrophotograph in an image formation apparatus including at least a photoconductor, a charger, a light exposure unit, and a developing device for forming a background area and an image area on the photoconductor using the charger and the light exposure unit and detecting a potential of the image area after transfer and controlling a developing electric field, thereby printing an electrophotograph, includes lowering the percentage of toner covering the image area on the photoconductor when the potential is detected.

[In a print control method of an electrophotograph and an image formation apparatus thereof, a surface potential sensor is placed in a post-transfer area and at the position, the potential on the photoconductor drum surface at the developing point is detected. When the potential on the photoconductor drum surface is detected, the developing bias is avoided at

the optimum timing, and the potential is detected at the position after transfer. The correction potential amount grasped, based on the in-machine humidity and the photoconductor drum film thickness previously measured, is added to the detected potential, and the potential on the photoconductor drum surface at the developing point is reproduced. Feedback control is applied to the potential on the photoconductor drum surface, whereby the developing potential on the photoconductor drum surface is kept stable.]

IN THE CLAIMS:

Please amend the claims as follows:

1. (Amended) A print control method of an electrophotograph in an image formation apparatus including at least a photoconductor, a charger, a light exposure unit, and a developing device for forming a background area and an image area on the photoconductor using the charger and the light exposure unit and detecting a potential of the image area after transfer and controlling a developing electric field, thereby printing an electrophotograph, said method comprising [the step of]:

lowering the percentage of toner covering the image area on the photoconductor when the potential is detected [, the toner covering].

5. (Amended) The print control method of an electrophotograph as claimed in claim 1, wherein when the potential is detected, avoidance control of [the] a developing bias applied to the developing device is performed so as to lower the toner covering percentage on the photoconductor.

6. (Amended) The print control method of an electrophotograph as claimed in claim 2, wherein, when the potential is detected [, avoidance control of the developing bias is performed after] and the detected potential passes through a developing nip width of the developing device, avoidance control of the developing bias is performed [in order] to suppress [the] a carrier fly.

12. (Amended) The print control method as claimed in claim 11, wherein a peripheral electric field of the image area is controlled based on [the] a detection value of the film thickness of the photoconductor.

13. (Amended) The print control method as claimed in claim 11, wherein the image formation apparatus [has] includes a dark attenuation storage section storing [the] a potential lowering amount which is caused by dark attenuation of the photoconductor previously [grasped] detected by the light exposure unit and corresponding to [the] a detection value of the film thickness of the photoconductor and a detection value of [the] a humidity sensor.

15. (Amended) An image formation apparatus of an electrophotograph comprising:
a photoconductor;
a charger;
a light exposure unit;
a developing device for forming a background area and an image area on the photoconductor using the charger and the light exposure unit [and detecting] which detects a potential of the image area after transfer and [controlling] controls a developing electric field;
and

a toner covering percentage lowering unit adapted to lower the toner covering percentage of the image area on the photoconductor when the potential is detected.